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Worldwide Report

EPIDEMIOLOGY

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JPRS-JAR-84-001

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WORLDWIDE REPORT EPIDEMIOLOGY

CONTENTS

HUMAN DISEASES

ALBANIA Successes in Production of Vaccines Hailed (Jolanda Koci Interview; ZERI I POPULLIT, 4 Nov 83) AUSTRALIA Spread of Golden Staph in Hospitals Drops Sharply (Mark Metherell; THE AGE, 28 Oct 83) Studies Report Aborigine Health, Mortality Rate (Jan Mayman; THE AGE, 28 Nov 83) Briefs 7 Immunization Shortfall CHILE Briefs 8 Campaign Against Typhoid Fever GUATEMALA Public Health Minister Reports 80,000 Cases of Malaria (PRENSA LIBRE, 9 Nov 83) HONDURAS Briefs 10 Chagas Disease in Santa Barbara

HONG KONG

	Five Cases of Malaria Bring Total for 1983 to 105 (Ophelia Suen; SOUTH CHINA MORNING POST, 11 Nov 83)	11
	Pollution of River Water Continues, Poses Health Hazard (Brendan Gullifer; SOUTH CHINA MORNING POST, 20 Nov 83).	13
INDIA		
÷.	Briefs Cholera Deaths Reported	16
INDONES	SIA	
	Dengue Hemorrhagic Fever in Jakarta Area (MERDEKA, 8 Nov 83)	17
	Cholera Reported in Central Java Province (SINAR HARAPAN, 5 Nov 83)	18
JAMAICA		
	Nine Deaths From Flu in 1 Week Reported by Infirmary (THE DAILY GLEANER, 25 Nov 83)	20
LEBANON	N .	
	Decree on Health Care Funding, Hospital Bed Distribution Issued (AL-SAFIR, 31 Oct 83)	22
MALAYSI	IA A	
	Hepatitis Situation in Malaysia Examined (John Pillai; NEW STRAITS TIMES, 10 Nov 83)	32
	Teams Set Up To Fight Elephantiasis (THE STAR, 10 Nov 83)	33
	Briefs Dengue Fever	34
MEXICO		·
	Briefs Jalisco, Coahuila Malaria, Typhoid Typhoid Doaths in Cuerrero	35 35

MOZAMBIQUE

H	Efforts To Combat Cholera Outbreaks Described (DIARIO DE MOCAMBIQUE, various dates)	36
	Cholera in Tete Province, by Antonio Cesar Cholera in Maputo	
NEW ZEAI	LAND	
F	Rubella Detected in Christchurch (THE PRESS, 28 Nov 83)	39
NICARAGU	JA	
I	Briefs Public Health Graduates New Hospital in Rivas	40 40
PEOPLE'S	S REPUBLIC OF CHINA	
7	Tianjin Reports Epidemic Prevention Results (TIANJIN RIBAO, 12 Nov 83)	41
I	Rapid Detection of Typhoid (Ji Riuting; ZHONGHUA YIXUE JIANYAN ZAZHI, No 3, 1983)	42
PHILIPP	INES	
ì	Measles Kills Seven in Davao (BULLETIN TODAY, 29 Nov 83)	43
	H-Fever Deaths Reported in Batangas (B. G. Malaluan; BULLETIN TODAY, 4 Dec 83)	44
SINGAPO	RE	
1	Briefs Nationwide Hepatitis-B Immunization Program	45
TANZANI	Α .	
. 1	Briefs Plague Outbreak in Tanga	46
VENEZUE	LA .	
:	Briefs Hepatitis Outbreak Reported	47

ZIMBABWE

Chiredzi Cholera Case Probed (THE HERALD, 3 Dec 83)	. 48
Briefs Bilharzia Infects 1 in 5	49
ANIMAL DISEASES	
INDIA	
Briefs Drive Against Rinderpest	50
NEW ZEALAND	
Briefs Culled Sheep Infected With Hydatids	51
VIETNAM	
Briefs Ravaged Rice, Sick Animals	52
ZIMBABWE	
Campaign To Control Foot-and-Mouth Disease (THE HERALD, 6 Dec 83)	. 53
PLANT DISEASES AND INSECT PESTS	
COLOMBIA	
Briefs Coffee Demonstrates Roya Immunity	. 55
MALAYSIA	
Cocoa Moth Infests Cocoa Plants (THE BORNEO POST, 20 Nov 83)	. 56
NEW ZEALAND	
Black Beetle, Cricket Huge Threat (THE NEW ZEALAND HERALD, 25 Nov 83)	. 57

SUCCESSES IN PRODUCTION OF VACCINES HAILED

Tirana ZERI I POPULLIT in Albanian 4 Nov 83 p 3

[Interview with Jolanda Koci: "The Curative and Preventive Capabilities of Our Medicine"]

[Text] One of the most important successes of our socialist public health program is the absence of contagious diseases on an epidemic scale. Chemical and immunobiological products produced in the Institute of Hygiene and Epidemiology have played their preventive and curative roles successfully for these diseases. In connection with these results our reporter discussed the successes achieved in this field with the supervisor in charge of the production section in the Institute of Medical Sciences: Candidate Jolanda Koci.

[Question] What can you tell us about the development of immunobiological products in our country?

[Answer] If we can say that we inherited almost nothing from the past, we can also say that on the eve of our liberation there was only one doctor who produced only one vaccine, the vaccine against rabies, in insufficient quantities. Today at the Institute of Hygiene and Epidemiology 22 vaccines and serums and about 200 diagnostic antigens and serums are produced. Let us mention bacterial vaccines against intestinal typhoid, cholera, whooping cough and tuberculosis (BCG); vaccines (antitoxins) against diphtheria and tetanus, viral vaccines against rabies, smallpox and measles which has placed our country among a group of countries who are now producing this vaccine themselves. The Eleventh Plenum of the Central Committee of the AWP (Albanian Workers Party) in 1971 stressed "let us increase at a faster rate, within a short period of time, the production of vaccines, serums and other immunological chemical products, giving priority to the preparation of combined vaccines (polyvaccines), and let us increase our efforts to continually improve their quality, and on a scientific basis organize and monitor their specific effects."

While implementing these very important tasks we, first of all, produced diphtheria and tetanus double vaccines and later diphtheria, tetanus and

pertussis triple vaccines (vaccines against diphtheria, tetanus and whooping cough, "pilidina" and in the last few years, the typhoid and tetanus double vaccine. These achievements were of great importance not only because substances of high quality were produced, but also because their use and application were greatly facilitated and children suffered reactions much less frequently than when pure vaccines were used.

[Question] `How has the use of these biological preparations influenced the epidemic situation in our country?

[Answer] The systematic application of our biological preparations has been the principal factor resulting in a pronounced decrease in contagious diseases. Diphtheria has, for years become very rare, and infection from typhoid and intestinal paratyphoid has decreased dramatically. Whooping cough is on the decrease; although there are occasional light cases, there are no major complications. The measles vaccine proved very effective when it halted the measles epidemic in our country in 1971. Actually, we have begun this year to eradicate this disease by giving systematic vaccinations to all those people who have not been vaccinated before. In the same way, we have begun a massive immunization program by using the antitetanus vaccines on a select group of the population who are more exposed to tetanus infections. This systematic, and documented, application for every person receiving the vaccine, will give better and better results in lowering the infection rate and will actually eradicate tetanus infections in our country.

An important factor in the complex struggle against tuberculosis in our country, has been the production domestically of the vaccine BCG and its systematic application. The epidemiological data has shown the benefits and the role this vaccine has played in lowering the incidence of tuberculosis in our country. Another important preparation produced in our country, which increases resistance to various diseases and prevents infections, is gamma globulin. It has been successful in the prevention of viral hepatitis, measles, whooping cough and other diseases. It is also used to increase resistance against organisms and as a cure for many other ailments.

In addition, serums, antitoxins, antidiphtheria and antitetanus preparations which are produced have been successfully used to cure people of and prevent them from getting these dangerous diseases.

[Question] What are some of the improvements that have been achieved in the quality of immunobiological preparations?

[Answer] Not only has there been an increase in the number of these products, but there have also been improvements in their qualitative content. This has been a result of improved production techniques, good controls and management from our sector. In conjunction with this, liophilization (the drying of biological products) for certain preparations has been another qualitative step in preserving these products without loss of quality, and has made it possible to use them at any time, in the remotest parts of our country. The liophilization of gamma globulin, hista globulin, BCG serums, antitoxic serums (against diphtheria and tetanus), rabies serums, smallpox

and measles vaccines, etc. The same can be said of a wide range of diagnostic serums and antigens manufactured in our country, which with increased production will become important in correctly diagnosing many infectious diseases in laboratories all over the country. The all-around development within our country and the development of our preventive medicine, is the basis for an increase in the number of necessary vaccines. We have undertaken experiments for producing inactive vaccines against the flu, which will be of great value in preventing this infection. We have recently been successful in starting the production of some immunochemical biological preparations which will be of special importance to the application of immunological methods which will be of great value in diagnosing infectious diseases and those with their own immunity factors. Within this 5-year period the task has been set down to produce viral vaccines against rubella and epidemic mumps which are important vaccines in further reducing infant mortality.

6160

CSO: 5400/3003

SPREAD OF GOLDEN STAPH IN HOSPITALS DROPS SHARPLY

Melbourne THE AGE in English 28 Oct 83 p 3

[Article by Mark Metherell]

[Text] The spread of the drug-resistant golden staph germ which reached epidemic levels in many Melbourne hospitals has declined sharply in recent months.

But a national conference of pathologists was told yesterday that doctors could not say exactly what has caused the decline and whether it would last.

The latest available figures show a decline of about 40 per cent in the number of hospital patients infected or colonised by the germ, methicillin-resistant staphylococcus aureus (MRSA).

The organism, which has developed resistance to most antibiotics, has caused serious illness and been linked with the deaths of infected patients.

The majority of MRSA patients were merely colonised which meant they carried the germ but without ill-effect.

Statistics collected from hospitals by the Health Commission indicate that the spread of MRSA peaked at about 370 cases a month in August last year.

By April this year, the incidence had dropped to about 215 cases a month and more recent unconfirmed figures indicate the decline has continued, the annual conference of the Royal College of Pathologists of Australasia was told yesterday.

This comes after a steady increase in the number of MRSA cases, particularly in Melbourne's big teaching hospitals, since the late 1970s.

A standing committee on infection control told the Government in February last year that Victoria's biggest hospitals would rapidly become "extremely dangerous" for patients and staff unless urgent steps were taken to halt the spread of MRSA.

The Government has since spent about \$3 million on infection control measures, including isolation nursing and hygiene campaigns. Doctors were also urged to reduce the use of antibiotics as it is antibiotic over-use which is thought to foster the development of resistant organisms.

A member of the infection control committee, Dr Robin Pavillard, who revealed the latest MRSA figures at the conference yesterday, said that MRSA had caused an epidemic and he used the word epidemic advisedly "because I believe that's what it was".

Dr Pavillard, the head of microbiology at the Royal Melbourne Hospital, said: "Hopefully the downward trend will continue.

"But we don't really know exactly what to attribute this success to."

Dr Pavillard criticised some of the publicity which attended the MRSA epidemic because he said it frightened some patients away from hospital. The publicity also led to the withdrawal of important scientific papers about MRSA and patients undergoing elective surgery.

The authors shied away because they feared their findings would be published in the lay Press before the 'Medical Journal,' he said.

(In February last year, 'The Age' published a series of Insight articles on MRSA which contained information included in other scientific papers which were later published in the 'Medical Journal'.)

cso: 5400/7515

STUDIES REPORT ABORIGINE HEALTH, MORTALITY RATE

Melbourne THE AGE in English 28 Nov 83 p 3

[Article by Jan Mayman]

[Text]

PERTH - There has been an encouraging decline in Aboriginal childhood illness in Western Australia over the past 10 years, according to research by the University of WA's department of child health.

In a report just published in the 'Medical Journal of Australia', Professor Michael Gracey, and his team, tell of a 16-fold improvement in hospital admission rates for Aboriginal children with infectious diseases, notably gastro enteritis and respiratory tract infections.

In 1971, the average Aboriginal child in WA was sick enough to be put in hospital with infectious disease four times a year.

By 1980 only one in four needed

to go to hospital.

Professor Gracey told 'The Age' he believed the improvement was due to the institution of comprehensive community-based preventative health programs.
"The involvement of Aboriginal

health workers and Aboriginal communities is having a strong influence towards self determination of health and welfare," he said.

However, Professor Gracey pointed to significant regional variations in the overall upward trend.

The decline in hospitalisation for gastro enteritis was most marked in the far northern Kimberly and southern regions of WA.

There was little change in the central Pilbara region over the 10-year period, the research indicated.

The pattern of infectious disease indicated grossly contaminated living environments, Professor Gracey said.

"Basic to overcoming the problem is the provision of better housing, education and job oppor-tunities. "The solutions are not simple and not easy."

There were still very real problems with Aboriginal health and living standards in Western

Australia.

Some Aboriginal groups were pressing for Aboriginal-run health services, but he was opposed to this concept.

He believed that the kind of State-run health service now existing in Western Australia was serving Aboriginal people well.

The State now had the most comprehensive data bank on Aboriginal health in Australia.

As well as the decline in incidence of gastro-enteritis, similar improvements have been recorded for pneumonia and bronchitis as well as infections of the ears and skin prevalent among Aboriginal children.

Meanwhile, a new health study on middle-aged Aborigines in rural New South Wales shows the death rate is up to 19 times higher than the general population.

The study also showed that Aborigines have a life expectancy more then 20 years lower then that of other Australians.

On average, male Aborigines died at 48 or 49 years of age, while female Aborigines died at 55 and 57 years of age, the study said.

The study was conducted by a four-member research team drawn from the Australian National University, the NSW Health Department and the Australian Institute of Aboriginal -Studies.

CSO: 5400/4369

BRIEFS

IMMUNIZATION SHORTFALL--Lack of immunisation for childhood diseases has become an alarming problem in Australia, according to a report in the latest issue of the Australian Medical Journal. Dr Neil Buchanan, Professor and Director of the Department of Pediatrics and Child Health at Sydney University, and Ms Rosalind Spencer, an education officer, called for an urgent study of the problem. "If this research is not undertaken as a matter of urgency, epidemics of whooping cough and measles such as are occurring in the United Kingdom can be expected to occur in Australia," the report said. The report quotes a study done in 1980 which shows that only 40 per cent of children in western Sydney had been immunised against polio and only 46 per cent against measles. It said the same study showed that only 27 per cent of one-year-olds in Sydney had had any vaccinations at all. The report claims that the incidence of whooping cough has increased both in Perth and Sydney. It argues that there is still a high incidence of whooping cough and measles in the United Kingdom. Whooping couch caused 20 childhood deaths in 1982 and measles caused 13 in the same year. [By Margaret Rice] [Text] [Sydney THE SYDNEY MORNING HERALD in English 22 Oct 83 p 17]

CSO: 5400/7515

COUNTRY SECTION CHILE

BRIEFS

CAMPAIGN AGAINST TYPHOID FEVER--Among the first announcements made by the minister on taking over his job, there was a statement designed to make it clear that pronounced emphasis would be placed on the problem of infectiouscontagious diseases within the context of environment health. "But since this is a multisector problem," he said, "our obligation is to define the action areas which are covered by our responsibility in order, with determination, to fight against typhoid fever which showed an increase of more than 300 percent in the metropolitan region." To.confirm this statement, the secretary of state ordered the campaigns launched in this respect to be stepped up, such as vaccination against typhoid fever and the ban on planting crops flush with the surface of the soil in communities where irrigation is done with waste water, such as in Maipu, Pudahuel, Renca, and Penaflor, primarily. In the specific case of the latter, this secretariat of state ordered the authorities of the Environmental Health Service to make an inspection in the field and to meet with the mayors of the townships involved for the purpose of checking into compliance with the pertinent resolution prohibiting the cultivation of truck gardening crops in areas irrigated with sewage water. [Excerpt] [Santiago LA NACION in Spanish 20 Nov 83 Materno-infantil Supplement p 9] 5058

CSO: 5400/2022

PUBLIC HEALTH MINISTER REPORTS 80,000 CASES OF MALARIA

Guatemála City PRENSA LIBRE in Spanish 9 Nov 83 p 4

[Text] There were 4,000 cases of malaria before the earthquake, and today the alarming figure of 80,000 is reported, a cause of great concern to health officials, according to what Dr Ramiro Rivera Alvarez, public health minister, said yesterday.

The health minister made this statement at a press conference in his office. Among the various forms of malaria, he referred to falciparum malaria, which can lead to death.

"There are various reasons for the increase in the disease," Dr Rivera Alvarez said. "One reason is that the authorities neglected the growth of the disease after the earthquake because they were of course involved with the aftermath of that disaster. But the disease has grown more prevalent over time, and today El Salvador's mosquito infestation is on the rise, since they have been spending their funds on other programs not in the health field, and so we are inheriting these mosquitos, which are wreaking havoc with our people."

"We should point out that this transmitter of malaria, the mosquito, has become immune to the products used by malaria eradication brigades, because of the amount of insecticide used in various branches of agriculture."

"This does not mean that we are not doing anything," the minister said. "We are pursuing the malaria eradication campaign and we have reduced the number of cases by 5 percent, particularly in the southern part of the country."

"I also want to make it clear that we have been holding talks on programs for immediate implementation with the authorities of the Republic of El Salvador and Mexico, since malaria is spreading alarmingly in the north of the country as well."

"I believe that if Guatemalans, Salvadorans and Mexicans all join together in a campaign, we could considerably reduce malaria, if not completely eradicate it. As I said before, falciparum malaria has been fatal in a number of cases in El Salvador, Mexico and Guatemala. I cannot, however, give you a precise mortality index for our country at the moment, but statistics are being prepared and will be reported soon." the health minister said in conclusion.

9805

CSO: 5409/2017

BRIEFS

CHAGAS DISEASE IN SANTA BARBARA--San Pedro Sula--Two persons presumably suffering from "Chagas disease" were discovered in Santa Barbara Department simultaneously with the start-up of a national campaign aimed at locating and combating the "picuda bedbug," transmitter of the disease. Dr Juan Fuentes, director of the Santa Barbara hospital, said that the two individuals, presenting the symptoms of "Chagas disease," were immediately sent to Tegucigalpa and that, in the meantime, the office for the control of carriers initiated an investigation by the department to discover the whereabouts of the carrier insect. Meanwhile, Dr Jose Antonio Andino, head of epidemiology at Health Region No 3, headquartered in San Pedro Sula, said that the office for the control of carriers headed by Dr Carlos Ponce, had initiated a national campaign to locate the above-mentioned insect and, based on the results obtained, set up a program to control it. Dr Fuentes made it clear that the cases discovered at the hospital which he directs have not been confirmed, even though the internist who treated the cases indicated that the symptoms presented are compatible with those of the disease in question. The doctor says that, although no other cases have appeared, instructions have been given for departmental action to be taken to ferret out the insect; this action was begun on Monday and is being concluded today. In view of the existence of the insects which carry this disease, a spraying program will be initiated for their extermination. The head of epidemiology at Health Region No 3 also said that the national campaign to ferret out the insect is not to be interpreted as an indication that an epidemic is underway but rather a preventive measure to protect the citizenry. "We are on the alert for any situation which might develop in this connection and, therefore, the people need not be alarmed," Dr Andino said. [Excerpts] [San Pedro Sula LA PRENSA in Spanish 4 Nov 83 p 9] 8568

cso: 5400/2019

FIVE CASES OF MALARIA BRING TOTAL FOR 1983 TO 105

Hong Kong SOUTH CHINA MORNING POST in English 11 Nov 83 pp 1, 13

[Article by Ophelia Suen]

[Text] Five malaria cases thought to be local in origin had been reported in the past month, the Government acknowledged yesterday. Another four cases were believed imported.

Four of the local cases were from the Sai Kung area and the fifth from Ta Ku Ling at the border.

However, the Medical and Health Department assured the public there was no cause for panic, and asserted that the sharp rise in the number of cases was the result of an intensified anti-malaria surveillance programme.

The new cases bring to 105 the number reported so far this year, of which 94 were imported, 10 of local origin and one caused by a blood transfusion.

This compared to 77 imported and three local cases last year, and 62 imported and one local case in 1981.

The Deputy Director of Medical and Health Services, Dr S. H. Lee, said more cases had been discovered because the Government had stepped up its surveillance programme, under which any villager in the New Territories who goes to a Government health clinic with symptoms such as fever or chills is automatically screened for malaria.

"There is no cause for alarm as these are just sporadic cases," said Dr Lee.

"All the affected persons have been admitted to Princess Margaret Hospital for treatment.

"Their condition is good and they are not expected to stay in hospital for too long."

Since the discovery of three malaria cases among military personnel stationed at the border in September, anti-mosquito measures, such as spraying

of mosquito breeding areas, have been intensified by staff of the Urban Services Department.

A department spokesman, Mr Chau Gar-wai, said a large area of forest and bushes in Sai Kung would be sprayed.

He said unpolluted field streams and rice fields along an eight-km coastline from Ho Chung to Pak Tam Chung were blackspots for malarial mosquitoes.

"The cleaner the stream water, the higher the risk of malaria vector breeding," Mr Chau said.

About 20 anti-mosquito gangs, comprising some 180 men, are patrolling the New Territories and other areas.

In addition, educational and anti-mosquito programmes were carried out at the two "peak periods" of the year, April/May and September/October.

An inter-departmental committee, set up recently to meet any possible outbreak of the disease, is keeping a close watch on the situation, a Government statement said yesterday.

The assistance of military health authorities has been enlisted and doctors in Government hospitals and clinics have been alerted to look out for cases, while private medical practitioners have been informed through the Medical Association.

"All suspected cases are being investigated thoroughly," stressed Dr Lee.

Six local cases of malaria were reported last month, but one was later found to have been caused through blood transfusion.

Meanwhile, a rising trend of imported malaria was also reported.

Dr Lee attributed this to increased travel in and out of Hongkong, particularly to countries where malaria is endemic.

He said this trend was shared by other countries because of increased volume of travel. -

"However, as far as Hongkong is concerned, at present our treatment against malaria is effective and there is no cause for alarm.

"The disease in Hongkong itself is not serious because the two commonly found malaria parasites, plasmodium vivax and plasmodium malariae, are receptive to treatment by Chloroquine."

Symptoms for both include headache, high fever, chills and sweating. Fatalities are rare.

The frequency of attack for vivax is every 48 hours with a relapse within two or three years, while malariae attacks every 72 hours and may stay in a patient for life.

cso: 5400/7514

POLLUTION OF RIVER WATER CONTINUES, POSES HEALTH HAZARD

Hong Kong SOUTH CHINA MORNING POST in English 20 Nov 83 pp 1, 8

[Article by Brendan Gullifer]

[Text] Water in the Taipo River is still seriously polluted eight years after a report which marked it as a major health hazard.

A survey undertaken by the Chinese University, which will be published later this year, found that there had been a slight improvement in the quality of the water.

But it says that the water, which is channelled into Plover Cove Reservoir, is still a cause for concern.

And a senior university lecturer warned this week that the practice of pumping dirty water into Plover Cove would slowly lower the environmental quality of the reservoir--despite Government assurances to the contrary.

"It's only common sense," said Dr Mark Kai-keung of the Chinese University Biology Department.

"The Government says the polluted water is diluted once it gets into the reservoir, but more and more chemicals are getting in there.

"I would anticipate that the water in Plover Cove Reservoir would deteriorate, however slowly."

His comments follow a report in the SCM POST last week that a newly-constructed New Territories pumphouse feeding Plover Cove Reservoir in times of flood has been built on a seriously-polluted river.

The location of the pumphouse, on the River Ganges near Lin Mah Hang Road, north of Sheung Shui, was described by a former Waterworks Department engineer as disturbing.

The SCM POST applied on Wednesday for permission to enter the closed border area to photograph the pumphouse and to take independent water samples for analysis.

A definite answer to the request had still not been received last night.

Dr Mark also criticised some of the answers by the Government to questions filed by the SCM POST on the River Ganges pumping station.

"The Government has repeatedly said water will only be taken from the streams during flood periods, but this is a vague statement," he said.

"Judging from the way water is taken from Plover Cove, the standards governing this sort of thing are very loose."

Dr Mark was also critical of the Government policy allowing floodwaters to "flush" a polluted stream first before it is pumped into reservoirs.

The flushing can, in fact, result in higher levels of pollution downstream, according to Dr Mark. In the case of the Taipo River, that means dirtier water flowing into Tolo Harbour.

Dr Mark refused to give details of the latest Taipo River survey until they are published later this year.

But he said the situation had improved only slightly.

"We still consider that river to be seriously polluted."

The 1975 report condemned the Taipo River as a health hazard.

The bacteriological content of the water would rapidly spread an infectious disease—such as cholera—in the event of an outbreak, it said.

"Other than the water being channelled into the reservoir, the remaining water is further polluted to a very high level in the lower course, before being discharged into Tolo Harbour.

"The bacteria it carries will contaminate the fishes, shrimps and shell fishes that are being taken from the Tolo Harbour hear Taipo market and are being sold later in the market.

"This poses considerable health hazards to the general public.

"The water from the middle course of the stream provides at least part of the water supply for the inhabitants in the Lam Tsuen Valley...however, the water is seriously-polluted, and the coliform bacteria concentration is a thousandfold above the safety limit set by international standards even in the middle course of the stream.

"Thus, from a hygienic point of view, it is highly undesirable to use such water even for bathing and washing purposes," the report said.

It also claimed that the cleansing of streams by summer rains was not as effective as had been believed.

"The summer rain is usually very heavy in Hongkong. We would expect that such rain would markedly reduce the water pollution; but, from our results, this is not the case.

"The data shows that the heavy rains only reduce the coliform bacteria by about 10-fold, and this observation is consistent throughout the whole length of the stream." [as published]

The report sounds a final note of warning: "The water that is being channelled into the Plover Cove Water Reservoir is highly-polluted with faecal bacteria."

Dr Mark said he was satisfied that the water treated after it left Plover Cove met World Health Organisation bacteriological standards.

He agreed, however, with an engineer's statement reported last week, that: "Most PCBs, fuel oil and viruses are unaffected by the conventional treatment processes and, unfortunately, these are the very compounds which are health hazards."

Dr Mark said that he had not conducted any tests in this field and a Water Supplies Department information officer was also unable to answer questions on the matter when he was contacted by the SCM POST this week.

CSO: 5400/7514

INDIA

BRIEFS

CHOLERA DEATHS REPORTED--Anti-cholera campaign: The zilla parishad has started an anti-cholera inoculation campaign in Ratnagiri taluka following reports of outbreak of cholera in Chandur village and two fatal cases.

[Text] [Bombay THE TIMES OF INDIA in English 10 Nov 83 p 5]

cso: 5400/7053

DENGUE HEMORRHAGIC FEVER IN JAKARTA AREA

Jakarta MERDEKA in Indonesian 8 Nov 83 p 3

[Text] Between the beginning of January and the beginning of November 106 children in the Tangerang area contracted dengue hemorrhagic fever. Eighteen of the children, 3 to 7 years of age, died of the disease.

Dr Kimar, the head of the Tangerang District Health Service, provided this information when he was contacted by a MERDEKA reporter on Monday morning [7 November].

He said that the total incidence of the disease among children less than 5 years of age was based on the records of Tangerang General Hospital, and that the hospital did not keep records on patients who may have been taken to other hospitals. He noted that persons who reside in Ciledug and Ciputat subdistricts usually are taken to Fatmawaty General Hospital in Jakarta.

The doctor said that the Tangerang District Health Service, in its efforts to combat the disease, is informing the public about the nature of dengue hemorrhagic fever and urging the people to change the water in their bathing tanks and to keep their drains clean.

Also, drains and gutters within a 100-meter radius of the residences of persons who have the disease are being sprayed.

Dracula Mosquitos

H. Mugnie Ismail, the head of the Public Relations Office of the Tangerang district government, calls the mosquitos who carry the disease "Dracula" mosquitos because they seek out healthy, well-nourished children in the under-5 age group.

According to Mugnie Ismail, a person who contracts dengue hemorrhagic fever shows no symptoms for the first 2 to 3 days but after 4 or 5 days a rash appears in the armpits.

The mosquito vectors have been found in part of the Perumnas housing area, in Tangerang city, and in subdistricts to the north and west of Tangerang.

Mugnie Ismail said that a total of 18 children have died of the disease, 6 in the Perumnas area, 3 in Tangerang city, and 9 in subdistricts north and west of Tangerang.

5458

CSO: 54.00/4363

CHOLERA REPORTED IN CENTRAL JAVA PROVINCE

Jakarta SINAR HARAPAN in Indonesian 5 Nov 83 p 3

[Text] As of the last Monday in October four people had died and five others were being cared for following an outbreak of cholera in Jungkang and Sawangan villages, Ajibarang subdistrict, Banyumas district, Central Java province. The dead are Mrs Tiyem, age 55, Harsono, age 2, Karno, age 4, and Sukardi, age 40. All but Sukardi resided in Jungkang village.

Dr Gatot Soeharto, the head of the Communicable Diseases Control and Prevention Section of the Banyumas District Health Service, confirmed that the disease had claimed victims in Ajibarang subdistrict when he was contacted by telephone on Wednesday morning, 2 November. He refused to provide any details on how many people were affected, saying, "Please contact the public health center for more information."

In answer to another question he said that on Saturday, 5 November the Banyumas branch of the Indonesian Medical Association will chlorinate the wells of the residents of Windunegara village in Wangon subdistrict. He said this area was selected because it borders on Ajibarang subdistrict.

A report received by the district head of Banyumas, R.G. Roedjito, states that as of the afternoon of Wednesday, 2 November there are five people in critical condition but that they can recover. They are Mrs Waisem, age 38, Mrs Dirah, age 39, Slamet, age 15, Wrsini, age 15, and Tukidi, age 40.

The public health center still has adequate supplies of medication to treat the disease. According to Dr Gatot, there are 25,000 bottles of intravenous fluid and a quantity of oralit salts on hand.

SINAR HARAPAN has observed that an outbreak of gastroenteritis or cholera occurs almost every year in Ajibarang subdistrict. Last year 19 people died of gastroenteritis.

Cholera (cholera asiatica) is an acute infection of the gastrointestinal tract and is caused by vibrio cholerae, a comma-shaped bacteria. Transmission in the Ajibarang area is through ingestion of food and water or by direct contact with a patient.

A mass vaccination is planned to prevent a cholera epidemic.

District Head Roedjito has instructed the people to give more attention to efforts to avoid the disease. The disease often occurs when there is a change in the seasons, as is now the case. Roedjito also has called on the people to improve the cleanliness of their surroundings.

5458

CSO: 5400/4363

NINE DEATHS FROM FLU IN 1 WEEK REPORTED BY INFIRMARY

Kingston THE DAILY GLEANER in English 25 Nov 83 p 17

[Text] There have been nine deaths at the Trelawny Infirmary between November 7 and 15 as a result of influenza. This situation is similar to that which occurred at the Eventide Home, Kingston, in July.

A total of 65 inmates were affected by the illness and the age range of the nine who died was between 63 and 85 years. Since November 15 there have been no new cases.

In mid-July 17 deaths occurred at Eventide Home among the elderly over 65 hears. Among them was one female. Investigations carried out by the Viral Laboratory at the University of the West Indies had identified the cause of death to be influenza A2, a strain identical to one found in Jamaica in recent months.

At the moment there is a lot of influenza in the island, along with cases of dengue fever.

A source told the GLEANER that the onset of the illness was on November 4 with the first death being recorded on November 7. The deaths occurred within less than two weeks of onset, within the period of November 7 to 15.

Nine members of staff were affected by the illness in an institution of a population of 82 inmates and 34 staff members. In fact, the first case was a member of staff.

The source told the GLEANER that the onset of the illness was on November 4 with the first death being recorded on November 7. The deaths occurred within less than two weeks of onset, within the period of November 7 to 15.

Nine members of staff were affected by the illness in an institution of a population of 82 inmates and 34 staff members. In fact, the first case was a member of staff.

The source told the GLEANER that clinical investigations had identified influenza to be the cause of death. It was stated that it was a similar situation to what happened at Eventide and that an examination of the

health systems in such institutions was being undertaken. The general treatment pattern included isolated which was effective in containing the spread of the problem.

It was pointed out that influenza was known to be more severe in older people and especially those who had other illnesses. It was further pointed out that at this time of the year the incidence of influenza was expected to increase. The source said that there had been cases of dengue fever and that steps were being taken to increase the mosquito control programme. Dengue fever is transmitted through the Aedes Aegypti mosquito. At least half the houses in Jamaica were breeding mosquitoes which would contribute to dengue.

Some 14 females between 50 and 96 years old at the St James Infirmary were also affected by influenza with five being admitted to the Cornwall Regional Hospital. No deaths occurred at this institution. The type of influenza identified is said to have been circulating in the island since November last year.

CSO: 5400/7513

DECREE ON HEALTH CARE FUNDING, HOSPITAL BED DISTRIBUTION ISSUED

Beirut AL-SAFIR in Arabic 31 Oct 83 p 6

[Article: "A Decree on the Distribution of Beds and Funds Among the Contracting Hospitals. Number of Beds Lowered 10 Percent from 1982. One Million Pounds Set Aside for Heart Surgery, 7 Million for Kidney Dialysis"]

[Text] Decree number 1050 has been issued. It deals with the distribution of funding set aside for treatment at the hospitals and private institutions contracting with the Ministry of Public Health, as well as for the physicians working at these hospitals.

The decree divides the hospitals into three classes. It determines the number of beds set aside for the patients who are to be treated at the expense of the Health Ministry, in addition to the daily fee per bed in hospitals of the second category.

The decree also sets forth the funding set aside for treatment in each hospital, in addition to the bases on which the sick can be admitted into these hospitals and the ways in which it is possible to work with the physicians who work in these institutions. It also deals with the manner in which recompense is to be paid them for their efforts.

The decree sets aside 1 million pounds of funding for heart and vascular surgery operations inside and outside Lebanon, as well as 7,125,000 pounds for kidney dialysis and 1,285,450 pounds for X-rays and medical photography.

Moreover, the decree sets the number of beds in the hospitals of the first category (schedule 1) in Beirut at 529, with 100 beds in both the American University Hospital and the Hotel Dieux, and 80 beds apiece in al-Maqasid Hospital and St Georgius Hospital.

The decree also contains a text dealing with the degree of treatment to which the patients are entitled at the expense of the Ministry of Health in the contracting hospitals.

Among the reasons which made the decree necessary is the fact that the Ministry drew up this system after the commission of some excesses by the

owners of the private hospitals was noted. The decree will prepare the way for limiting acts of waste and fraud of the kind the Ministry of Health is exposed to.

In accordance with this decree, the Ministry of Health lowered the number of hospital beds 10 percent beneath the number contracted for in 1982, which was about 1,177 beds distributed among 83 hospitals.

The text of the decree follows:

Article One: Contracts are being drawn up with the hospitals and private medical institutions, as well as with the physicians working in them, for the treatment of the patients belonging to the Ministry of Public Health and of emergency cases, as well as for the provision of health and surgical services having a medical character. This is to be done after the achievement of the operations specific to the contracting process, and until the end of December 1983, it being stipulated that work will continue in the following year in accordance with the contracts previously in force for a period of 2 months at the most following the issuing of the decree on the distribution of funding.

Article Two: The degree of hospitalization for the patients belonging to the Ministry of Public Health is determined by the first section of the attached schedule, in accordance with the schedule used by the Ministry of Public Health. The compensation for the efforts of the physicians is determined in accordance with the official schedule of medical activities used by the ministry. For activities other than those of physicians, the fees, the various kinds of schedules of medical services, and the value of the signs referring to them are to be determined in accordance with a decision issued by the minister of public health, on the basis of the suggestion made by the director of medical care, with the acquiescence of the general director of the Ministry of Public Health.

Article Three: The hospitals and institutions mentioned in Article One of this decree are classified into three sections on the basis of the accompanying schedules, which are considered an integral part of this decree. The classification and fees of the first section of these schedules, as well as the share of the cost borne by the patients, are to be determined via a decision of the minister of public health, on the basis of a proposal by the director of medical care and with the acquiescence of the general director of the Ministry of Public Health, within the funds appropriated for this section.

As for the second section, lump sum funding will be determined according to the number of beds and a set daily fee, as is shown in the accompanying schedule.

Article Four: It is forbidden to admit patients belonging to the Ministry of Public Health in a degree other than that used by the ministry, even if the patient agrees to pay the difference in degree on his own. His treatment card will be considered invalid. It is forbidden to make any expenditure for a patient who received treatment in a degree other than that used by the Ministry of Public Health.

It is permitted to admit patients of the second degree to the university hospitals—The American University Hospital and the Hotel Dieux—in order to carry out the following delicate kinds of surgery: brain and neural surgery, open heart surgery, surgery on children born prematurely, surgery on children less than 2 weeks old, and surgery on children with burns. It is stipulated that the contract agreement made with the Ministry of Public Health will note these cases, and that the patient will pay the difference in degree from his own pocket. It is permitted to admit patients afflicted with an infectious disease who must be treated in complete isolation. The Ministry of Public Health will bear the expense. These cases and their fees are to be determined by a decision of the minister of public health, on the basis of a proposal by the director of medical care and with the acquiescence of the general director of the Ministry of Public Health.

Article Five: In the usual cases, the patient will be given an entry card by the relevant units belonging to the Ministry of Public Health for treatment in one of the contracting hospitals. This will occur in accordance with the conditions laid down by a decision of the minister of public health, on the basis of a proposal by the director of medical care and with the acquiescence of the general director of the Ministry of Public Health.

In emergency cases, the patient may enter one of the contracting hospitals or institutions before acquiring the treatment card, it being stipulated that the hospital or institution will inform the monitoring physician within 48 hours of the patient's admittance that an emergency case is at hand. It will then send a medical report confirmed by the monitoring physician to the Health Ministry via the patient's relatives, in order to obtain its acquiescence to treating the patient within 48 hours of the date on which the ministry was informed. If none of the patient's relatives are present, the hospital must arrange his treatment with the Ministry of Public Health. If the Ministry of Public Health is not informed or does not acquiesce, then it will bear neither responsibility nor compensation.

Article Six: All hospitals and institutions of the three categories mentioned in this decree must provide the Ministry of Public Health with statements showing the number of patients they have admitted at the ministry's expense, the kind of disease, its treatment, the duration of treament, and the associated cost. As for the efforts of the physicians, they are set forth in special schedules. All physicians will be recompensed directly. The provisions of this decree will be applied in accordance with the laws which are followed and in force and the texts of the agreements which will be drawn up with the hospitals and private institutions for this purpose. The details of the execution of this decree are to be determined by a decision from the minister of public health, on the basis of a proposal from the director of medical care and with the acquiescence of the general director of the Ministry of Public Health.

Article Seven: Funds allocated for one of the three categories can be shifted to another by means of a decree adopted by the cabinet, on the basis of a proposal by the minister of public health and the minister of finance. This is also true of funds allocated within a particular category, which can be

transferred by means of a decree adopted by the cabinet, on the basis of a proposal by the minister of public health and the minister of finance.

Article Eight: This decree is to be published and distributed as need be.

First Category

(Medicine, surgery, maternity, pediatrics.)

Province of Beirut

Hospital	Number of Beds
The al-Maqasid al-Islamiyyah Hospital	80
St Georgius Hospital	70+/80, 10 for children
The American University Hospital	100
Najjar Hospital	15
Hotel Dieux	100 .
The House of Healthal-Birbir Hospital	40
Rizq Hospital	10
Beirut Hospital	25
Al-Lubnanial-Ja'itawi Hospital	15
Al-Zahra' Hospital	40
The Mother and Child Care Hospital	3
Haydar Hospital	4
Baydun Hospital	3
Doctors' Hospital	5
Fu'ad Khalifah Hospital	3
The Brotherhood Ra's al-Nab' Hospital	3
Farid Sirhal Hospital	3
Province of Mount Lebanon	
Lady of Aid HospitalJubayl	35
Heart of Jesus Hospitalal-Hazimiyah	25

Province of Mount Lebanon Hospitals (cont'd)	Number of Beds
St Charles Hospital	15
St Teresa Hospitalal-Hadath	5
The Coast Hospitalal-Ghabiri	15
St Joseph Hospitalal-Durah	35
Abu Judah HospitalJall al-Dib	5
Cedar Hospitalal-Zalqa	. 5
The Bahnas Medical Center Hospital	35 '
Samir Sirhal Hospitalal-Rubwah	5
Faith Hospital'Alayh	20
Al-Watani Hospital'Alayh	7
Sharaf-al-Din Eye Hospital	3
Hamlin HospitalHamana	5
The B'aqli Medical Center, Ltd.	. 12
The al-'Azuniyah Hospital	. 3
Sisters of the Cross HospitalDayr al-Qamar	15
Lady of Lebanon HospitalJuniyah	25
St George Hospital'Ajlatun	5
Bayt Shabab Hospital	3
Jubayl Hospital	6
St George Hospitalal-Hadath	5
Al-Hayik Hospital	5
Munib 'Uwaydat HospitalShahim	3
North Lebanon Province	,
The Charitable Islamic HospitalTripoli	65
Al-Husayni HospitalTripoli	20

North Lebanon Province Hospitals (Cont'd)	Number of Beds
Mazlum HospitalTripoli	5
Al-Manla HospitalTripoli	5
Al-Nini Hospital	5
Abu Rihal Hospital	10
Al-Razi Hospital	, · 7
St Mansur HospitalHasrun	5
St John HospitalZgharta	10
Monks' HospitalZgharta	3
Al-Bitrun HospitalAl-Bitrun	40
Haykal Hospitalal-Kurah	5
Al-Bisar HospitalTripoli	5 .
Al-Watani HospitalTripoli	4
Province of the South	
Hamud HospitalSayda'	15
The Hospital of the SouthSayda'	20
Labib Medical Center	10
St Antoine Hospital ('Assaf)	5
Al-Hariri Medical CenterSayda	20
Al-Naqib Hospital	5
Dr Fu'ad 'Asiran Hospital	. 7
Sha'ban HospitalNabatiyah	5
Dr 'Ala'-al-Din al-Sarafind Hospital	7
Jabal 'Amil HospitalSur	15
Ghandur HospitalNabatiyah	5
Dr Ili Ili Hospital	5

Province of the South Hospitals (Cont'd)	Number of Beds	
Dala'ah Hospital	5	
Kalut Hospital	5	
Province of the Biqa'		
Tall Shihah HospitalZahlah	35	
Hospital of the Ladyal-Farzal	5	
Dr Muhammad 'Ali al-Mays HospitalShtawrah	10	
Al-Ahli HospitalBa'labakk	15	
Ibn Sina HospitalBa'labakk	7	
Hamid Farhat Hospital	3	
Al-Khatib Hospital	5	

Second Category (With Fixed Daily Fee)

Type of Treatment	Name of Institution	Number of Beds	Daily Fee	Number of Days	Sum
Chest diseases	Bahnas	135	45	153	929475
	al-'Azuniyah	50	45	153	344250
	Hamlin	50	45	153	344250
Mental Diseases	Monastery of the Cross	650	45	153	4475250
	Monastery of the Cross Children	35	45	153	240975
	The Islamic House of the Disabled	385	45	153	2650725
	Al-'Asfurtiyal Prison	n 75	45	153	516375
	Al-Finar	75	45	153	1721250

Type of Treatment	Name of Name o	Number of Beds	Daily Fee	Number of Days	Sum
Chronic Diseases	The Lady Intilyas	450	25	153	1721250
	Dayr al-Qamar	300	25	153	1147500
	House of Mercy	280	25	. 153	1071000
	The Islamic House of the Disabled	235	25	153	898875
	Al-Finar	125	25	153	478125
•	The Sami al-Qudsi Home	50	25	153	191250
	The Harisa Shelter and Orphanage	55	25	153	210375
	The House of the Sick Old Man	25	25	153	95625
	The Services Association (Tripoli)	60	25	153	229500
	Hamlin Hamana	15	25	153	57375
	St Joseph's Monastery (Jarbita)	15	25	153	57375
	Al-Walid Sanatorium (Syria)	55	45	153	378675
Incurable Paralysis	The Medical Qualification Center	30	31	153	142290
	Al-Kifa'at	5	31	153	23715
•	The Sami al-Qudsi Home	10	31	153	47430

Type of Treatment	Name of Institution	Number of Beds	Daily Fee	Number of Days	Sum
Incurable Paralysis	Monastery of the Cross	30	31	153	142290
	The Brain Paralysis Center ('Ariya)	8	35	153	42840
Curable Paralysis	al-Qartabawi	20	95	153	290700
	The Medical Qualification Center	25 ,	95	153	363375
	The Services Association (Tripoli)	20	95	153	290700
	Al-Kifa at	5	95	153	72675
•	Bayt Shabab	55	95	153	799425
	The Bahnas Medical Cente Sakunyuz	5 r	95	153	72675

Third Category (General Services in the Various Medical Institutions)

Type of Treatment	Sum of Funds for Five Months
Paralysis Equipment	480000
Massage Sessions	200000
Cobalt and Radium	464285
Gland Examination and Radioactive Isotopes	300000
X-rays and Medical Photography	1285450
Heart and Vascular Surgery on Lebanese Territory, Surgical Procedures Done Abroad Cannot Be Done in Lebanon, on the Basis of the System Used by the Directorate of Health Care	1000000

Type of Treatment (Cont'd)	Sum of Funds for Five Months
Kidney Dialysis	7125000
Kidney Transplants, Inside and Outside Lebanon	250000
Brain Scanning	31250
Laboratory Tests	717950
Human Blood and Plasma	1000000
Muscle Scanning	15000
Compensation for Surgery Not Called for by Hospitalization and Determined by a Decision from the minister of health	500000

HEPATITIS SITUATION IN MALAYSIA EXAMINED

Kuala Lumpur NEW STRAITS TIMES in English 10 Nov 83 p 9

[Article by John Pillai]

[Text]

CLOSE to one million Malaysians have contracted a hepatitis virus which gives them an estimated 340 times greater chance of getting liver cancer and cirrhosis.

University of Malaya microbiologist Dr Violet How arrived at this staggering figure based on the four to six per cent carrier rate detected from blood samples at the General Hospital's blood transfusion centre and the blood bank at University Hospital.

Researchers estimate that Asian carriers of the virus, called Hepatitis B, have about 340 times greater risk of getting primary liver cancer compared to non-carri-

The Hepatitis B virus lives in the liver and produces the same symptoms as the more commonly known Hepatitis A, which affects about 1,000 to 2,000 people per year. These include fever, loss of appetite, vomiting, tiredness, dark uring and jaundice.

Half the Hepatitis B cases are contracted through peri-natal transmission — that is, from mother to child within the womb or soon after birth. It also spreads via the skin, open cuts and wounds, blood, saliva and semen.

As such people who come into regular contact with blood, such as doctors, dentists and nurses, are three to seven times more likely to contract it. So are sexually promiscuous people, prostitutes, and homosexuals.

Another high-risk group are drug addicts, who may get it as a result of swapping unsterilised syringes.

These one million healthy carriers do not realise they are affected, and that they constantly pass it on through various means. The virus can even pass to others through a passionate kiss, the sharing of a tooth-brush or a shaving blade!

The bad news is there is no specific treatment for these carriers, the majority of whom are in the 15 to 30 age-group. They will simply have to wait for a medical breakthrough.

But the good news is that those still unaffected, especially those in high-risk jobs, can be vaccinated against it, since two vaccines have recently become available.

"Immunisation of all children born of carrier-mothers is one good first step we could take. High risk individuals could also be screened and vacquinated," Dr How suggests

"Other preventive measures could include improving public and personal hygiene, upgrading sewerage disposal systems and stepping up public education."

"Since there is overwhelming evidence of a close link between Hepatitis B and serious diseases like cancer and cirrhosis, it is certainly worthwhile combating it

now.
"In the long run, prevention of Hepatitis B will alleviate much suffering and death, loss of production through illness, and the high cost of cancer and cirrhosis treatment.

"Indeed this is a case where prevention is not merely better than cure; it is the only alternative."

There are an estimated 215 million Hepatitis B carriers in the world, and according to the WHO, up to 15 per cent of Asian and African populations are affected, compared to only one per cent in US and Europe.

About 20 to 40 per cent of all cancer deaths in Asia and Africa are caused by this virus, compared to only two per cent in the US.

Dr How says 90 per cent of those who contract Hepatitis B spontaneously recover and become naturally immune, but the virus persists in five to 10 per cent of people, and these become chronic carriers.

Only about one per cent per year of these chronic carriers will spontaneouly stop being carriers.

ly stop being carriers.

Dr How, who is researching the subject, is organising committee chairperson of a symposium on Hepatitis B to be held on Nov. 19 at University Malaya's medical faculty.

TEAMS SET UP TO FIGHT ELEPHANTIASIS

Penang THE STAR in English 10 Nov 83 p 7

[Text]

KAMPUNG GAJAH, Wed.

— Three teams have been set up in the Perak Tengah and Hillir Perak districts to prevent the spread of elephantiasis.

The State Director of Medical and Health Services, Dr Jagjit Singh, said the teams had conducted studies in 14 mukims covering 200 villages in Kampung Gajah, Parit and Hutan Melintang.

intang.

He said about 7,500 positive cases of microfilaria were identified since the elephantiasis control teams began their services in 1961.

It was found that the number of cases had declined from 4,000 to 1,000 cases in villages where initial and secondary studies were conducted.

were conducted.
Dr Jagjit, who was speaking at the State-level international World Health Day celebrations here today, said the worst effected were Mukim Pulau Tiga, Mukim Kampung Gajah,

Mukim Bota and Mukim Pasir Panjang Ulu in the Perak Tengah District. The celebrations were launched by Mentri Besar Encik Ramli Ngah Talib.
Encik Ramli said the Government would build more health centres and clinics, especially in the rural areas.

areas. He said a total of 472 He said a total of 4/2 health projects costing \$168 million were being implemented throughout the State since the beginning of the present development programme.

The Mentri Besar later led more than 700 people including government officers and members of voluntary organisations in cleaning areas surrounding Kampung Gajah.

He also presented prizes to winners of the "clean home" competition which was participated by six villages in the Kampung Gajah District Council area. — Bernama.

MALAYSIA

BRIEFS

DENGUE FEVER--In Sarawak, there have been six new suspected cases of dengue reported in the first division. This brings the total number of suspected dengue cases to 338. Of this, the number of confirmed cases remains at 11. [Text] [BK261155 Kuala Lumpur Domestic Service in English 1130 GMT 25 Oct 83 BK]

MEXICO

BRIEF

JALISCO, COAHUILA MALARIA, TYPHOID--Some 1,700 cases of malaria and typhoid have been found in the states of Jalisco and Coahuila, where Malaria Eradication Campaign squads and doctors are already at work, trying to prevent epidemics. Dr Celedonio Cardenas, head of the evaluation unit of Jalisco's Coordinated Public Health Services, has told our correspondent Eduardo Chimely that, in the last 60 days, as the rainy season came to an end in the northern, central and coastal regions, 1,000 cases of malaria and typhoid have been found. The highest incidences of malaria have been found in the towns and settlements adjacent to the Santiago River, owing to the stagnant waters. And Typhoid was found especially among the inhabitants of the municipality of Ojuelos, on the border with the state of San Luis Potosi, where contaminated water is being drunk, "but," the official affirmed, "the situation is not cause for concern." Finally, he pointed out that the people most affected by these diseases were Huichol Indians and the poor. For his part, Joaquin Paredes Fuentes, our correspondent in Saltillo, Coahuila, has stated that medical squads from the ISSSTE [Institute of Social Security and Services for Government Workers] have found about 700 cases of malaria in the northern and central regions of that state. Dr Raymundo Verduzco Rosan, director of the ISSSTE clinic, said that 7 Malaria Eradication Campaign squads are working in the areas affected by the diseases. The cases have been noted principally in minors and special treatment is being given the victims. [Text] [Mexico City EXCELSIOR in Spanish 11 Nov 83 p 7-D] 12336

TYPHOID DEATHS IN GUERRERO--Chilpancingo, Guerrero, 23 Oct--Five persons have died and 36 others are seriously ill from a typhoid epidemic which has afflicted the residents of Ahuejote and which is traced to the consumption of contaminated water from a well. Fernando Laso, director of the local health center, said that 19 of the most serious cases had been treated at the Vicente Guerrero hospital and that doctors and nurses had been sent there to prevent the epidemic from spreading. He explained that the epidemic began 4 days ago and was caused by the consumption of contaminated water from a well located in the vicinity of Ahuejote, a village situated at 18 km from Tixtla. He said that among the persons who died are Mariano Don Juan Arturo and Miguel Alcaraz Antonio. [Text] [Mexico City EXCELSIOR in Spanish 24 Oct 83 p 9-D] 8568

EFFORTS TO COMBAT CHOLERA OUTBREAKS DESCRIBED

Cholera in Tete Province

Beira DIARIO DE MOCAMBIQUE in Portuguese 29 Oct 83 p 4

[Article by Antonio Cesar]

[Text] An outbreak of cholera occurred recently in the districts of Changara and Moatize and in the city of Tete, capital of the province of the same name, as a result of the drought that is severely devastating the area south of the Zambezi River.

According to Aurelio Zilhao, provincial director of health in Tete, the outbreak of the epidemic was caused by the disappearance of several permanent water sources due to the drought, a circumstance that forced the inhabitants to dig small wells, which they often did without taking the necessary health precautions.

Prompt action by health authorities in close coordination with the party structures and the population in general reduced the seriousness of the situation, which is now under effective control. No new cases have been reported since last June.

The drought in that region in the central part of the country constitutes a priority in combined efforts not only by health authorities but also by the entire provincial government, "in which the health sector is merely one mosaic in the pyramid," to quote Aurelio Zilhao.

To alleviate the water shortage, innumerable operations are underway to open new wells, distribute foodstuffs on a priority basis, introduce drought-resistant crops, and clean up the environment.

On the other hand, "the specter of diseases due to the food shortage in the province has grown, and malnutrition is currently the main cause of the confinements and deaths recorded by our department. In addition, the water shortage has increased the array of diarrheal diseases, of which cholera is only one component."

Medical Network

• The medical network, which according to Zilhao cannot be considered deficient, is nevertheless inadequate for dealing acceptably with the growing needs of the inhabitants.

Aurelio Zilhao said: "If we add to that fact the problem of the unsuitable location of some medical facilities, we can conclude that not only are they unsuitably distributed, but paradoxically, some units are underutilized."

The reality that currently exists demands that the Provincial Health Directorate take steps aimed at: "adapting medical units to suit the activity they engage in rather than in terms of existing physical circumstances, improving their physical facilities, establishing a correct relationship between the various levels of care, and fostering the construction of peripheral medical units in localities regarded as being of priority interest. Because of the shortage of building materials, those units are often constructed of available local materials."

Cadre Training

To improve the quality of the work being done, it is also urgent to solve the problem of the shortage of medical and paramedical personnel as well as that of the availability of medicines.

The training of nurses and elementary-level midwives (the first class of 35 students have already completed their training) and the prospect of starting a class next year for basic-level nurses and microscopists are some of the solutions nourishing the hope of overcoming many problems.

Fight Against Tuberculosis

Zilhao emphasized: "As far as tuberculosis is concerned, the provincial unit's concern has been, first, to make health workers aware of the importance of this major endemic disease; second, to provide them with a solid scientific foundation concerning the disease; and, finally, to establish district centers where they do not yet exist.

"Since the situation of the laboratory network has improved through the existence of at least one laboratory in each district, we feel that the minimum conditions have been created for expanding the program."

Preventive Medicine

Zilhao said: "In the field of preventive medicine, despite the difficulties being faced--primarily the shortage of fuel, the drought, and the resulting hunger, among other things--fulfillment of the program can be considered normal or even better than normal."

Attention in this area has been directed basically at the priority programs, such as the PAV (Expanded Vaccination Program), maternal and infant health, major endemic diseases (pulmonary tuberculosis), and water sanitation.

As far as the PAV is concerned, the following fulfillment levels were achieved: 160, 140, and 128 percent respectively for the first, second, and third doses of the triple-immunity and polio shots, and 125 and 100 percent for the tetanus shots given to students.

Vaccination programs for measles and BCG also achieved satisfactory results.

In the field of maternal and infant health during the first half of this year, the main concern boiled down to improving the quality of the work done, both by sponsoring basic courses and seminars for personnel connected with the program and by attempting to provide the health units with the minimum material resources for their correct operation and even the improvement of their physical circumstances.

Zilhao concluded by saying: "But achievement of the goals for this program was not total, since there were negative deviations in some components, examples being the care of pregnant women (90 percent) and institutional births (87 percent). In the case of children under 4 years of age, the goal was 120-percent achieved."

Cholera in Maputo

Beira DIARIO DE MOCAMBIQUE in Portuguese 17 Oct 83 p 2

[Text] About, 300 persons are currently hospitalized due to an outbreak of cholera that reached the city of Maputo within the past few weeks.

In an interview with reporters from Radio Mozambique, the director of the Center for Prophylaxis and Medical Examinations, Oscar Monteiro, said that most of the cases have now been confirmed by laboratory analysis.

Oscar Monteiro also said that the first cases of cholera in Maputo originated in a number of districts in Gaza Province, chiefly Chibuto and Manjacaze.

He added: "Many of the cases that appeared later originated in the Machava Central Jail, where there was an epidemic of large proportions."

However, several preventive measures have now been adopted. For example, health brigades are working to identify and disinfect prisoners with the disease, and at the same time, the inhabitants are being provided with health education.

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RUBELLA DETECTED IN CHRISTCHURCH

Christchurch THE PRESS in English 28 Nov 83 p 9

[Text]

Four cases of rubella (German measles) have been identified in Christ-church, fulfilling Health Department predictions that the virus would soon appear in the city.

in the city.

All of the cases reported

involved pregnant women.

The department's Acting Medical Officer of Health in Christchurch, Dr M. A. Brieseman, said that the disease was likely to spread because of the number of unprotected women.

He warned all women of child-bearing age to make sure they were protected because of the risk of damage to the foetus.

He advised women to visit their doctor even if they had been immunised because immunity did not last indefinitely. Blood tests and immunisation would be free.

A recent survey by the department indicated that between 15 and 20 per cent of women in their child-bearing years had not been immunised against rubella or had not received immunity through having the disease.

Dr Brieseman said that although immunisation carried no known risks, women should wait at least three months after immunisation before attempting to conceive.

He estimated that there was a one in three or one in four chance during pregnancy of rubella's damaging the foetus. The risk was greater in the earlier stages of pregnancy, he said.

The greatest danger posed by rubella is to the child's hearing. Damage to the eyes, heart, and brain is

also possible.

The Health Department warned in August that an outbreak of rubella was likely, after an increase in cases was reported in Britain.

About 50 cases of rubella were identified in Dunedin recently, and other cases were reported in the North Island.

Symptoms of the disease are similar to those of measles, and include a generalised rash, but rubella was usually milder, said Dr Brieseman.

"Rubella can sometimes be so mild you scarcely know you have got it," he said.

The cases identified in Christchurch were detected during ante-natal tests. The last outbreak of rubella in the city was in 1980.

PUBLIC HEALTH GRADUATES--The first 17 professional doctors and dentists have completed the training course and postgraduate work in epidemiology and public health offered by the Center for Research and Health Studies (CIES) of the Ministry of Health. During the closing ceremony, Rene Darce, viceminister of training and development of the Ministry of Health, emphasized the efforts of the revolution to train professionals in the field of scientific health research and announced that most of the graduates will perform an important role in the country's special regions. The ceremony, which was held in the auditorium of the Concepcion Palacios Health Complex, also served to inaugurate the Scientific Symposium of the CIES during which the graduates will be subjected to a graded test and will present their theses. During the Scientific Symposium from 14 to 18 November 1983, 11 scientific research papers will be presented, on subjects such as Leishmaniasis Tugumentaria and Mountain Leprosy in Nicaragua, Evolution and Analysis of Hospital Services, Medicines as Critical Development Factors and others. [Excerpt] [Managua BARRICADA in Spanish 15 Nov 83 p 8] 8143

NEW HOSPITAL IN RIVAS--One of the recently built hospitals is located in Rivas. Its construction was the result of the solidarity of the government and the people of Sweden, which donated 70 million cordobas for the construction of the hospital's physical plant, while the Revolutionary Government is investing 30 million cordobas to provide it with modern equipment, with an overall cost of 100 million cordobas. The hospital was officially turned over recently by the vice-minister of construction, Mario Flores Fonseca, on behalf of the 250 Ministry of Construction workers who completed the project on schedule. Minister of Health Leaguido and a friend of Nicaragua, Tomasal Lagenwall, delegate of the Swedish International Cooperation Agency, toured the 11,750 square meters of the hospital plant which is located 1 kilometer from Rivas. The new Rivas hospital which was completed barely 4 years after the victory of the Sandinist Popular Revolution will benefit the more than 112,000 inhabitants of the country's fourth region. It will be fully operational in January 1984, with more than 200 beds, operating rooms, a delivery room, a pediatric clinic and the capability of handling 1,000 medical appointments a day. The hospital has four sections consisting of spacious waiting rooms, outpatient treatment facilities, an auditorium, basement, supply rooms, pharmacy and complete modern fire prevention equipment. It also has its own air conditioning plant and an emergency electricity plant and lighting system. The Ministry of Construction has built two new hospitals in the country since the victory of the revolution. The other hospital is in Matagalpa. [Excerpt] [Managua EL NUEVO DIARIO in Spanish 12 Nov 83 p 9] 8143

TIANJIN REPORTS EPIDEMIC PREVENTION RESULTS

SK060902 Tianjin TIANJIN RIBAO in Chinese 12 Nov 83 p 1

[Text] The municipal public health and epidemic prevention station held celebrations yesterday to mark its 30th founding anniversary. The municipality's achievements in public health and epidemic prevention scored over the past 30 years were displayed vividly by pictures and slides.

The municipal public health and epidemic prevention station was officially established in November 1953. Under the leadership of the party and through the implementation of the principle of "prevention first," the station has achieved some results in disease control, health monitoring and supervision, and scientific research personnel training with the concerted efforts from all quarters and has played a positive role in ensuring the people's health. Some acute infectious diseases, occupational poisoning, endemic diseases, and common childhood diseases have been controlled more effectively each year.

The incidence of some of them has dropped considerably and others have been nearly completely eliminated. Compared with 1953, the incidence of measles, polio, encephalitis, and whooping cough declined, ranging from 56.5 to 93.8 percent, in 1982. There have been no cases of diphteria since 1977, and the number of people victimized by occupational poisoning has dropped from some 400 or 500 in the 1950's to fewer than 100. The percentage of near-sighted primary and middle school students has been brought down to 20 percent. This made Tianjin one of the provinces and cities with the lowest percentage. In area of fluorine poisoning, efforts have been made to improve water to make 300,000 people free from fluoride poisoning. Epidemic prevention has also brought childhood infectious diseases under control, reduced child mortality, and has lengthened the average life span of the people of the municipality. The average life span in 1982 was more than 30 years more than in the 1950's. Since 1980, when the station began examining imported foods, it has examined nearly 10 million tons of imported foods, of which some 200,000 tons were found to be below sanitation standards. The station has made timely reports to departments concerned, which have asked foreign countries for over 2 million dollars of compensation, thus reducing the state's economic losses and safeguarding the state's international prestige.

The station has vigorously conducted research in epidemic preventive science and technology and has played a positive role in practical prevention work by offering some new methods, technology, and theoretical viewpoints. So far, 12 of its scientific research projects have received awards from the state or the municipality. Some of the projects have created certain influences in other countries. The station has also paid attention to training a great number of grassroots medical and health personnel, and teaching public health and epidemic prevention technology. It trained 2,663 public health and medical personnel in 1983, thus strengthening grassroots public health and epidemic prevention forces.

CSO: 5400/4115 41

RAPID DETECTION OF TYPHOID

Beijing ZHONGHUA YIXUE JIANYAN ZAZHI [CHINESE JOURNAL OF MEDICAL LABORATORY TECHNOLOGY] in Chinese No 3, 83 pp 171-172

[Article by Ji Riuting [0679 3843 1656] et al of Hospital No 72, Chinese People's Liberation Army: "Study on Rapid Detection of Pathogen in Blood of Typhoid Patients"]

[Summary] A technique of using Hiss's stain to determine Salmonella infection from blood specimens of fever patients is described. Of the 28 cases of typhoid, confirmed with Widal's reaction method, both this technique and the blood culture method produced 3 negative cases, while negative results were obtained with both for all 17 cases of other forms of fever to make it impossible to compare the accuracy rate of the two. This technique utilizing blood concentration of pathogens and antiserum action takes less than 2 hours to complete, however. Quantitative difference among smears of a single blood specimen is rather great; therefore, more than one smear should be tested to reduce the error rate. The test procedure is reported in detail.

6248

MEASLES KILLS SEVEN IN DAVAO

Manila BULLETIN TODAY in English 29 Nov 83 p 36

[Text]

TAGUM, Davao del Norte — Seven more children died in a measles epidemic in the five mountain sitios near here, reports reaching here said.

Reports said that the death toll has already reached 107. However, only 59 children were confirmed dead by the New Bataan office of the Ministry of Health.

According to a report to the New Bataan MOH office of Mrs. Imelda Mocallay, barangay health worker, the latest victims died Thursday before the arrival of a government medical team led by Dr. Corazon Bor-

dios, New Bataan municipal health officer.

Mocallay added that the primary school building of New Bataan is being utilized by them to house the victims. She said that the children of Mansaka natives, who are also afflicted with measles, continue to arrive in the school building to avail of medical services.

She said that the medical supply they brought was already exhausted and they are requesting for additional dextrose and medicines for the ailing children. (Ped Velasco)

H-FEVER DEATHS REPORTED IN BATANGAS

Manila BULLETIN. TODAY in English 4 Dec 83 pp 1, 12

[Article by B. G. Malaluan]

[Text] Batangas City--Four children died, 109 others are confined in hospitals, while an undetermined number of others are sick in their homes as the week-old outbreak of hemorrhagic fever in various barangays of this city remained unchecked.

Dead were Exnor Perada, 4, Marjorie Mendoza, 4, Aristeo Dimaano, 6, and Lea Lee Saul, 11 months.

City Health Officer Florencio Alea said the over 100 patients are confined at Batangas regional hospital (BRH) and four private infirmaries in this capital. About 20 severe cases have been taken to Metro Manila.

BRH Director Pedro Sancianco said the 37 patients at the regional hospital are mostly from Batangas City. The others are residents of barangays Kumintang, Alangilan, Gulod, Tabangao, Pallocan, Bolbok, Sta. Rita, and Calicanto.

The provincial health office also reported incidences of dengue fever (mild form of H-fever) in other Batangas towns.

Domingo Aguillera, assistant public health officer, said cases reported in the said municipalities are not as grave as those in Batangas City. He, however, raised the warning that if the spread of the disease in the locality is not stopped immediately, it may get out of control.

Aguillera advised the public to take necessary preventive measures such as destroying the breeding places of insects. He explained that H-fever is caused by a virus carried by a mosquito species which flies and bites only during daytime.

cso: 5400/4364

NATIONWIDE HEPATITIS-B IMMUNIZATION PROGRAM--HEALTH authorities in Singapore, where Hepatitis B is a serious problem, plan to immunise the entire population against it. With about six to 13 per cent, or approximately 240,000 people affected with the disease on the crowded island, the authorities are not taking chances. Infected individuals are legally obliged to report the illness to health authorities, while clinics and hospitals are required to report all cases to the Environment Ministry's Epidemiological Unit, to help formulate preventive measures. Immunisation of high risk individuals has commenced, and public education stepped up. In two years babies born in Government hospitals will be immunised against it just as they are immunised against TB by BCG. The high cost of immunisation, (about \$200 per person), which has deterred many countries from an immunisation programme, is being tackled with plans to produce the vaccine locally. This april, Temasek Holdings, a Singapore Government company, was reported to be negotiating with a US drug firm to manufacture the vaccine and to eventually export it to the Asean market. About 90 per cent of all liver cancer patients in Singapore have had Hepatitis B, and these cancer patients now cost the Government \$4 million to treat. (No comparable statistics are available for Malaysia because there is no directory of · cancer patients available.) About half the number of liver-cirrhosis patients have also had a history of Hepatitis B. [Text] [Kuala Lumpur NEW STRAITS TIMES in English 10 Nov 83 p 9]

TANZANIA

BRIEFS

PLAGUE OUTBREAK IN TANGA--Health experts in the Tanga region are making efforts to fight an outbreak of plague at (Mlalo) Ward where it has caused the death of 19 people. A meeting of the Central Committee in charge of contagious diseases, which was held at the Ministry of Health Headquarters in Dar es Salaam, was informed that 115 people have contracted the disease in three districts of Tanga region. A health official, who toured the ward, told the meeting that the ward has been placed under quarantine. He said doctors and nurses, who are dealing with the disease which broke out early last month, are faced with transport problems and a shortage of drugs. [Excerpt] [EA190308 Dar es Salaam Domestic Service in Swahili 0700 GMT 18 Dec 83]

HEPATITIS OUTBREAK REPORTED -- The incidence of hepatitis has gradually increased in Venezuela in the last 10 years and based on official figures from the SAS [Health and Social Welfare], over 5,000 cases were recorded in 1982. For Jesus Luque Hernandez, Ministry of Health epidemiologist, the figure does not correspond to reality. He explained that the 5,000 cases are only from the health department registers, but that no other government agency such as the IVSS [Venezuelan Institute of Social Security], Welfare Board, doctors' offices or private clinics report cases of the disease. For that reason, the figure may actually be triple the amount because of the failure to register complaints. So far this year, 2,822 cases have been reported, with 17 deaths, which represents a significant increase of 42.5 percent. Dr Luque Hernandez maintains that the manifestations of the disease revolve around the liver like an inflammatory process and in many cases, result in a yellowing of the mucous membranes, commonly called jaundice. In many cases of hepatitis, symptoms are very discreet and their benign nature causes them to go unnoticed, usually the case with hepatitis A. Dr Luque Hernandez explained that at the present time, there is a high risk of contracting hepatitis B, the most severe form, at all hospital services. "We know that persons working with blood banks, in dialysis units and renal transplant sections, and dentists are those who run the greatest risk. In learning their number, we can have an idea about the implications of research and think about possible protection for these groups by using vaccine for hepatitis B. [Text] [Caracas EL_NACIONAL in Spanish 9 Oct 83 p C-10] 11,464

CHIREDZI CHOLERA CASE PROBED

Harare THE HERALD in English 3 Dec 83 p 1

[Text]

TEN environmental health officers from Massyingo have been sent to Chiredzi to deal with a confirmed case of cholera and four other suspected cases.

An official of the Masvingo provincial medical office of health told The Herald yesterday that the four suspected cases were in Chief Dshovani's area at John Clinton Bridge on the Sabi River.

The confirmed cholera case was in Chisumbanje, where it was feared there might be more than initial reports indicate.

Reports of the cholera case had been received on Tuesday this week and it had been established that the cases at John Clinton Bridge were connected with those at Chisumbanje. The 10 medical personnel were taking preventive measures so that it does not spread, accord-

ing to the official.

The cases that were being treated all involved adults. The report comes eight months after the Government deployed a team of medical personnel in all border areas to fight a possible outbreak of cholera.

Cholera is caused by drinking contaminated water, or contracted from flies that carry the comma-shaped organism called vibro cholera or from poor sanitation.

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The principal symptoms of the disease in its severe form are diarrhoea and vomiting followed by acute stomach cramps and a high fever.

Cholera epidemics can kill up to half of those affected, but where it can be checked the effect is so mild that those afflicted may not take to bed.

BILHARZIA INFECTS 1 IN 5--ABOUT 20 percent of Zimbabwe's population suffers from bilharzia, the Secretary for Health, Dr Office Chidede, said in Harare yesterday. He told The Herald that in the northern, southern and south-eastern parts of the country about 50 percent of people suffered from bilharzia and his ministry had launched several programmes to eradicate it. "We have done research on the disease and we are probably the leaders in this kind of research in this region." He said the disease was more common in areas with irrigation schemes. "We can use chemicals but this means killing other living things in rivers and, because of that, we are going to try an imported plant which actually kills snails only." [Text] [Harare THE HERALD in English 23 Nov 83 p 1]

cso: 5400/43

DRIVE AGAINST RINDERPEST -- Tirupati, Nov. 14. A Centrally-sponsored project will be launched to eradicate within five years rinderpest, the acute, contagious and often fatal virus disease of cattle, sheep and goats prevalent in South India, especially in Andhra Pradesh. A Central Government task force which had two-day deliberations here on the eradication of rinderpest agreed to provide additional resources to the affected States to complete the task by March 1988. The tast force's sittings, third in a series, were chaired by Dr. C. M. Singh, its head. Directors of Animal Husbandry from Haryana and West Bengal and from the four Southern States attended. Dr. G. Raja Rao, Director of Animal Husbandry, Andhra Pradesh, who briefed newsmen on Sunday said that under the programme, the Centre would rush additional equipment and vehicles while State Governments would have to put to full use their existing infrastructure. As a follow up, the Animal Husbandry Directors of the affected States have been asked to submit before the end of November a detailed report on disease conditions. According to sources, the South Indian delegates at the meeting pointed out that the disease was prevalent among cross-bred cattle. The task force has recommended the use of tissue culture vaccine for the eradication. Giving an account of the disease in Andhra Pradesh, Dr. Rao said that in 1980-81 alone 2,361 heads of cattle died in 190 outbreaks, out of 4,882 animals affected. In 172 outbreaks in 1981-82, animals numbering 2,763 perished out of 5,500 affected, while it was 1,122 out of 2,630 in 93 outbreaks during 1982-83. So far in 1983-84 there were only 35 outbreaks. [Text] [Madras THE HINDU in English 15 Nov 83 p 11]

CULLED SHEEP INFECTED WITH HYDATIDS—Two per cent of culled ewes from 21 farms in the Waipa County were found to have true hydatids when slaughtered at various freezing works between Marchlast year and November 14 this year. The county council was told yesterday that according to medical records at the Waikato Hospital a 73-year-old woman and a 12-year-old boy were admitted with the disease last year. The county's hydatids control officer, Mr D. R. Hunter, said dog owners should be very concerned, especially at this stage of the hydatid eradication campaign, that a 12-year-old got infected. The boy had been in contact with an infected dog and had required major surgery to cure the disease. Mr Hunger said some farms would always be high risks unless precautionary measures were taken, such as proper killing facilities, housing and dog control, and denying dogs infected meat. Waipa County Council now has 29 project employ— [Excerpt] [Auckland THE NEW ZEALAND HERALD in English 24 Nov 83 p 8]

VIETNAM

BRIEFS

RAVAGED RICE, SICK ANIMALS—Insects—mostly rice hispa—have ravaged some 717 hectares of 5th month-spring rice seedlings in Haiphong and another 300 hectares in Binh Tri Thien Province. These localities are stepping up care and protection for these rice seedlings against insects and blight. In the recent past, epizootic diseases—such as foot and mouth disease among cattle—have appeared in places in Long An, Tay Ninh, and Binh Tri Thien Provinces. It is necessary for all localities to adopt the necessary measures to protect their domestic animals against epizootic diseases during the winter. [Text] [BK121204 Hanoi Domestic Service in Vietnamese 0400 GMT 11 Dec 1983]

CAMPAIGN TO CONTROL FOOT-AND-MOUTH DISEASE

Harare THE HERALD in English 6 Dec 83 p 11

[Text] The Ministry of Agriculture is encouraged by the response of the people to its campaign to have the anti-foot and mouth fences respected by all.

A ministry spokesman said yesterday that the Department of Veterinary Services has been engaged in a publicity campaign on the control of footand -mouth disease in those areas where it is endemic.

The disease is being controlled through fences and vaccination. Game fences are being erected to restrict buffalo to Hwange and Gona-re-Zhou national parks. Buffalo carry the disease and are the source of infection for cattle.

Cattle fences are being erected to demarcate vaccination and buffer zones and bear the signs advising the people that they belong to the Government and should not be cut.

All cattle in the zones will be vaccinated twice a year and when ready for slaughter will go straight from the zones to slaughter. If they do not they will have to spend time in the buffer zones for quarantine.

The spokesman said: "Several meetings have been held with villagers, councillors, ranchers and Government officials at which the role of fences in the control of foot-and-mouth disease was explained, and the fact that control of the disease will enable Zimbabwe to capture a lucrative beef export market in the EEC which is likely to bring in about \$70 million in foreign currency."

Those at the meetings were told that the control measures would prevent disease outbreaks, so avoiding the much disliked cancellation of cattle sales.

Veterinary department staff have already spoken at meetings in Chiredzi, Mwenezi, Bulawayo, Matibi 2, Sengwe, Zaka, Chibi, Matibi 1 and Maranda. Meetings are planned for Nyamandhlovu and Gwanda districts where erection of the fences is now in progress.

The department and Agritex have prepared video and slide films and information leaflets in all three major languages for further meetings between extension workers, livestock inspectors and the people in affected areas.

"Feedback from the people at the meetings is so far encouraging. There was a clear indication that the people know the disease, they fear it and recognise the advantages obtained in controlling it."

COFFEE DEMONSTRATES ROYA IMMUNITY--Manizales--A total of 1,200 kilograms of coffee of the Colombia variety has been sold to farmers by the Caldas Coffee Growers Committee, in the first sales made since the outbreak of coffee rust in this part of the country. As the weeks go on, seed will continue to be sold to those coffee growers who have decided to abandon cultivation of the traditional coffee varieties in order to avoid outbreaks of this fungus. Alberto Jaramillo Botero, executive director of the committee, said that the demand for seed of the Colombia variety will increase as the work of fumigating the affected areas is completed. Technicians say that this coffee variety is immune to rust. [By Jose Fernando Garces] [Text] [Bogoto EL SIGLO in Spanish 17 Nov 83 p 16] 5157

COCOA MOTH INFESTS COCOA PLANTS

Kuching THE BORNEO POST in English 20 Nov 83 p 14

[Text]

KUCHING, Sat:- A new pest on cocoa, called 'cocoa moth or cocao pod borer' had affected nearly 250 acres of an estate in Lawas, in the Fifth Division.

A statement issued by the State Ministry of Agriculture and Community Development said today the pest, scientifically identified as 'acrocercramerella cops snellen' had been known to serious damage to the cocoa industry in Indonesia, Sabah and The Philippines.

The statement said estate the management been instructed not to take out or sell any planting material or beans from the estate.

An agricultural staff, assisted by police assisted by police personnel, was stationed at Merapok, a nearby town, to prevent the planting materials from being taken

out or brought into Lawas.

The public has also been reminded not to import any of the planting materials from Indonesia, Sabah and The Philippines.
Notices to that effect had

been put up at airports, ports and wharves throughout the state and any person round/guilty of the

offence would be liable to a fine not exceeding \$1,000 or imprisonment not exceeding six months or both.

The statement added that staff from the Agriculture Department would hold regular dialogue session with farmers in the area to acquaint them with the pest.

Similar session will also be held in the various divisions soon.

The statement advised farmer not to be unduly concerned over the outbreak as necessary measures were being undertaken.

It also said one way to prevent the spread of the pest was to pluck off all pods and treat them with insecticides, prior to burning or burying their shells and to spray the whole estate with insecticides for a period of three months.—

BLACK BEETLE, CRICKET HUGE THREAT

Auckland THE NEW ZEALAND HEARLD in English 25 Nov 83 p 13

[Text] Cricket eggs by the million are waiting to hatch in many Northland pastures and severe damage from black beetle is predicted for areas like the south Kaipara this summer.

Black field cricket egg counts on some sites sampled by the Ministry of Agriculture and Fisheries scientists have been as high as 1500 to the square metre, particularly around Kaitaia.

While the danger exists for large numbers of crickets to devastate pastures as happened on some farms last year, it is certain that farmers will be wide awake to the problems and solution this season

With the "flushing" technique which became available last summer through the ministry, farmers are now able to assess accurately when crickets have reached problem proportions and apply poison baits.

The problem with black beetle, however, appears more difficult.

Sampling

Dr Douglas King, of the Ruakura insect control group, says site sampling in the South Kaipara area has shown large numbers of adult black beetles.

As a result high larval populations of black beetle are expected and pasture damage will be compounded if there is a dry summer.

He says farmers should be sampling now to see if they have black beetle problems, as insecticides to control the pest should be applied before the middle of December.

Pastures on light, free-draining warmer soil are more susceptible to attack.

Sampling calls for digging nine spade-square divits at five-pace intervals across a paddock.

Dr King says all the divots are searched for adult beetles and the number found is multiplied by three to give a rough estimate of adults to the square metre.

Estimates If adult numbers are 15 or more to a square metre this month, larval population of several hundred to the square metre can be expected in summer.

If adult numbers of 10 or more a square metre are found now in predominantly ryegrass pastures, summer larval populations of more than 60 a square metre will occur, causing severe pasture damage.

Dr King says the severity of pasture damage will depend greatly on the level of summer rainfall and this makes the prediction of black beetle larval numbers which will cause pasture damage difficult.

Clay Soils

Insecticide controls for black beetle are expensive and farmers will have to decide whether the cost is worth it, or whether later pasture renovation, or planting forage crops to augment grazing are economically better.

Sampling for black beetle has a value in helping farmers determine whether their problem is cricket or black beetle.

The question of how much black beetle damage is done on clay soils is still being researched.

But the flushing technique for crickets developed by a ministry entomologist at Whangarei, Dr R. H. Blank, forces crickets to reveal their presence early in the season, when their presence had hitherto often gone undetected.

It seems quite possible that the black beetle has taken the blame for a fair amount of damage by crickets in the past.

Many farmers used cricket bait last season and the amount sold was around 930 tonnes, against 71 tonnes in the previous bad season in 1982.

Supplies are reported to have run out in February last summer and suppliers will have a difficult time gauging the likely increase in demand this year.

Density

Dr Blank says farmers in the far north may well start looking for cricket presence about Christmas, while they may not be detected in some areas until as late as mid-January.

He says it is important that farmers not only detect the presence but the density. They should also check after baiting, which usually gives and 80 per cent kill, to see if a follow-up is needed.

The threshold when baiting is worthwhile on dairy farms is about 10 crickets to the square metre, although Dr Blank says it looks, from five years of research results, as if baiting when there are even five crickets to the square metre may be worthwhile.

The ministry has pamphlets available on black beetle and an updated version of the advice on crickets published last season.

CSO: 5400/4362

END